

REMARKS

Claims 1-19 are pending. Claims 1 and 12 are independent, and the other claims are dependent directly or indirectly on claim 1. New claims 17-19 recite in dependent form optional or preferable features deleted from claims 1 and 6. The claims as amended define the invention more precisely, and reconsideration of the application is respectfully requested.

Claim 7 is objected to because of the mistaken appearance of the copyright symbol. It has been corrected to read "(c)," and withdrawal of the objection is respectfully requested.

Claims 1-16 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner questions the phrase "absorbing metal oxide" in claim 1, omission of the step of catalysis from claims 1 and 12, use of the term "preferably" in claim 6, specifying polymer as a main ingredient in claim 10, confusion between "obtained" and "obtainable" in claims 13 and 14, the layers recited in claim 16, and the meaning of "main" in claims 8, 10 and 11.

The amended claims avoid the rejection.

Claim 1 as amended is directed to a method for pretreating a surface by way of precipitation of a selected precipitation metal in the presence of a catalytic metal. In accordance with the claim as amended, an adsorbing, rather than absorbing, metal oxide is deposited on the surface. (This agrees with the specification at 5:8, 14; 6:17-18; 7:8; 8:7; 9:16; 10:9.) The surface including the adsorbing metal oxide is treated with a solution of transition metal ions and subsequently with a solution of catalytic metal ions. The adsorbing metal oxide is selected to adsorb the transition metal ions, and the transition metal ions are selected to reduce the catalytic metal ions into catalytic metal. The catalytic metal is selected to catalyze a subsequent precipitation of the selected precipitation metal.

If we parse the claim from the end towards the beginning, we see that the catalytic metal is selected to catalyze a subsequent precipitation of the selected precipitation metal, the transition metal ions are selected to reduce the catalytic metal ions into catalytic metal, and the adsorbing metal oxide is selected to adsorb the transition metal ions. Claim 1 encompasses a particular method if the method meets directly or by equivalents the criteria the claim sets out, but not otherwise.

The term “preferably” has been deleted from claim 6.

Claim 10 as amended does not specify glass, a ceramics or a biological material “as main ingredient.”

Claim 12 has been amended to specify treating the surface with a solution of catalytic metal ions of a metal from the platinum group “selected to catalyze a subsequent precipitation of the selected precipitation metal.”

Claims 13 and 14 have been amended to specify that the coating is “obtained” by a pretreatment of a non-conducting article by the method according to claim 1.

Claim 16 has been amended to specify that at least one of the electrolytic plating layers has a high electric conductivity.

The term “main” has been deleted from claims 8, 10 and 11.

In view of the preceding amendments and remarks, withdrawal of the rejection under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claims 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ejerer GB 1,401,600. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Cane USPN 5,648,125.

The rejections are respectfully traversed. The claims have all been amended by amendment of the independent claims. Claim 1 and the claims dependent thereon are directed to a method for pretreating a surface of a non-conducting material to be plated by way of precipitation of a selected precipitation metal in the presence of a catalytic metal. In accordance with the method, an adsorbing metal oxide is deposited on the surface, and the surface including the adsorbing metal oxide is treated with a solution of transition metal ions. Subsequently, the surface is treated with a solution of catalytic metal ions. In accordance with the invention as defined in these claims, the adsorbing metal oxide is selected to adsorb the transition metal ions, the transition metal ions are selected to reduce the catalytic metal ions into catalytic metal, and the catalytic metal is selected to catalyze a subsequent precipitation of the selected precipitation metal.

Claim 12 has been similarly amended. In particular, it specifies treating the surface including the manganese dioxide or ochre with a solution of Sn^{++} ions or Co^{++} ions and subsequently treating the surface with a solution of catalytic metal ions of a metal from the platinum group selected to catalyze a subsequent precipitation of the selected precipitation metal.

The prior art relied upon neither discloses nor suggests the invention as defined by the amended claims. The passage of US 5,648,125 at 28:40-29:41, cited in the Office action, teaches the use of an acid rinse, which would remove the metal oxide. That of course is contrary to the specification at 7:16-20 and to the amended claims. We note moreover that US 5,648,125 was cited in the international search report only under category A and that the written opinion found novelty in claim 1.

The examiner evidently (and properly) regards claims 1-12 as patentable over GB 1,401,600. We respectfully submit that the British patent is not a bar to the patenting of claims 13-16, since they depend on claim 1. (The dependency is stated near the end of claims 13 and 14 and may have been missed.)

The British patent is cited against claims 13-16 for its disclosure of a manganese oxide layer on an epoxy/glass substrate, treating with a solution of tin,

treating with a palladium solution, and forming electroless nickel and electrolytic copper layers. The examiner refers particularly to 28:40-29:41. Those features have no relevance to the combination of features that lend patentability to claim 1 and the claims dependent thereon, as discussed above.

For the reasons stated, withdrawal of the rejections under 35 U.S.C. 102(b) is respectfully requested.

There being no further objections or rejections, the application is believed to be in condition for allowance. Issuance of a notice of allowance is respectfully requested.

Respectfully submitted,
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